

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A kit for the detection and measurement of a positively charged transition element in a sample, where the measured transition element is a tag on a biologically active material that binds with at least one of an analyte and analyte complex, comprising:
 - (a) at least one tag, wherein the at least one tag ~~comprises~~ consists of at least one ~~or more isotopes isotope~~ of ~~[[a]]~~ one or more positively charged transition elements ~~element~~ and a linker moiety, wherein the tag is capable of directly tagging a biologically active material;
 - (b) instructions; and
 - (c) packaging means,and wherein said transition element is any element having an atomic number of 21-29, 39-47, 57-79 or 89.
2. (Previously Presented) The kit of claim 1 further comprising a biologically active material, wherein the biologically active material is directly tagged with at least one isotope of a tag comprising a transition element.
3. (Currently Amended) A kit for the detection and measurement of a positively charged transition element in a sample, where the measured transition element is a tag on a competition analyte, comprising:
 - (a) ~~[[a]]~~ at least one tag, wherein the at least one tag comprising at least consists of one or more isotopes isotope of one or more positively charged ~~[[a]]~~ transition elements ~~element~~ and a linker moiety, wherein the ~~tag is~~ tag is capable of directly tagging a competition analyte;
 - (b) instructions; and
 - (c) packaging means,

and wherein said transition element is any element having an atomic number of 21-29, 39-47, 57-79 or 89.

4. (Previously Presented) The kit of claim 3 further comprising a competition analyte, wherein the competition analyte is directly tagged with a tag comprising at least one isotope of a transition element.
5. (Previously Presented) The kit of claim 1 further comprising capture molecules that bind the analyte, analyte complex or competition analyte.
6. (Previously Presented) The kit of claim 1 further comprising solid support means, wherein the solid support means comprises binding sites for one of the analyte and a capture molecule.
7. (Original) The kit of claims 6 wherein the solid support means is selected from the group consisting of microwell plates and beads.
8. (Original) The kit of claim 7 wherein the beads are selected from the group consisting of sepharose beads, agarose beads, polystyrene beads and polymeric microspheres.
9. (Original) The kit of claim 6 wherein the capture molecules are selected from the group consisting of antibodies and aptamers.
10. (Previously Presented) The kit of claim 1 further comprising standards.
11. (Previously Presented) The kit of claim 1 further comprising a dilution buffer.
12. (Previously Presented) The kit of claim 1 further comprising an elution buffer.
13. (Previously Presented) The kit of claim 1 further comprising a wash buffer.

14. (Previously Presented) The kit of claim 1 further comprising an assay buffer.

15-19. (Canceled)

20. (Previously Presented) The kit of claim 1 wherein the isotope is selected from a group consisting of the noble metals, lanthanides, rare earth elements, gold, silver, platinum, rhodium, iridium and palladium.

21. (Original) The kit of claim 3 wherein the biologically active material is selected from a group consisting of an antibody, Fab', aptamer, antigen, hormone, growth factor, receptor, protein and nucleic acid.

22. (Previously Presented) The kit of claim 1 wherein the tag includes more than one element.

23. (Previously Presented) The kit of claim 1 wherein the tag includes more than one isotope.

24. (Previously Presented) The kit of claim 1 wherein the tag includes more than one atom of an isotope.

25. (Previously Presented) The kit of claim 23 wherein the tag includes a different number of atoms of each isotope.

26. (Previously Presented) The kit of claim 1 comprising two or more tags for simultaneous determination of two or more analytes.

27. (Previously Presented) The kit of claim 2 comprising two or more tags for simultaneous determination of two or more analytes.

28. (Canceled)

29. (Currently Amended) A kit for the detection and measurement of an element in a sample, where the measured element is a tag on an analyte in a sample, comprising:

[[a]] at least one tag, wherein the at least one tag consists of one or more
~~comprising at least one~~ isotopes ~~isotopes~~ of [[a]] one or more positively charged transition
elements ~~element~~

- a) and a linker moiety, for directly tagging the analyte with a transition element;
- b) reagents for tagging the analyte with the tag; and
- c) reagents for running a sample containing the tagged analyte on an electrophoreses gel;
- d) instructions; and
- e) packaging means,

and wherein said transition element is any element having an atomic number of 21-29, 39-47, 57-79 or 89.

30.-36. (Canceled)